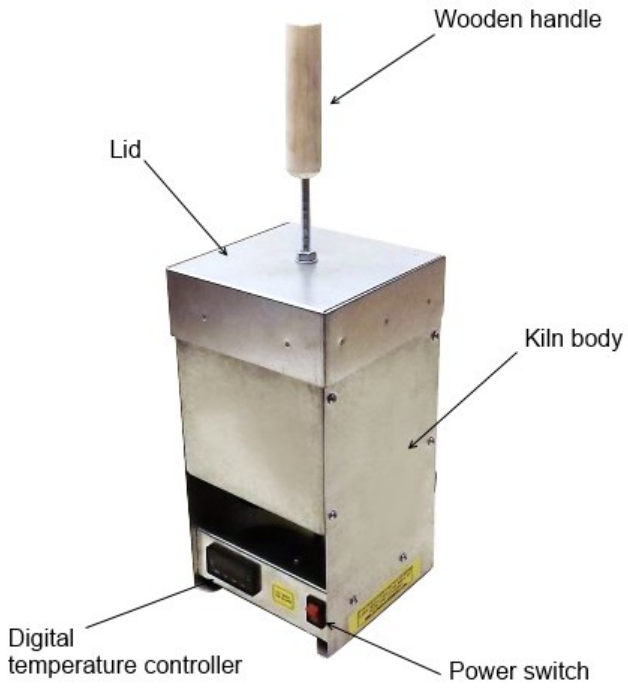
R9D-33 ELECTRICAL METAL MELTING KILN USER MANUAL

PRODUCT INTRODUCTION:

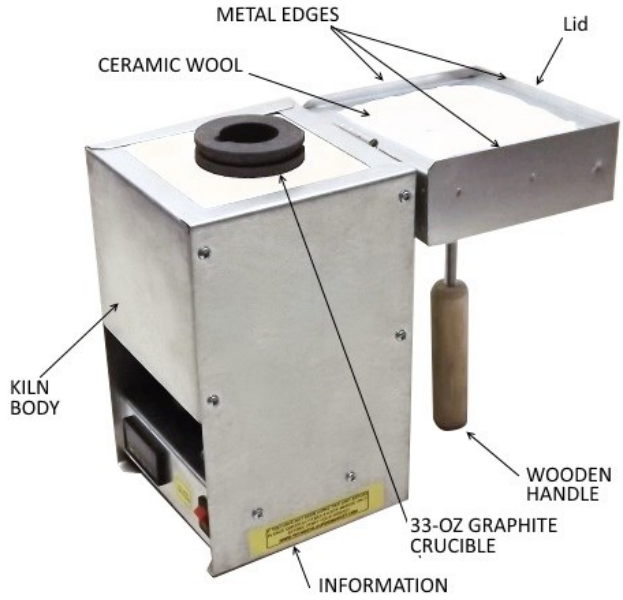
This digitally controlled, electrical metal melting kiln is especially designed to melt down up to 33-OZ (1000 Gram) of PURE gold or any other metal with a CASTING point below 1100°C / 2012° F (such as lead, aluminium, copper, brass, bronze, tin, silver, gold and their alloys). The R9D-33 kiln has a standard digital temperature controller and can reach and hold any single temperature between 20°C (68°F) and 1130°C (2066°F) once settled. It means that when this kiln is connected to a power supply and is switched on, it will start to heat up gradually without stopping until a pre-settled temperature will be reached. The digital kiln is able to hold the required temperature until you will pre-set a different temperature or switch it off. The kiln reaches the temperature of 1130°C (2066°F) approximately in 60-90 minutes depending of the quantity and size of your metal pieces inside the graphite crucible. More metal (larger pieces) means more heating time.

Pic:1

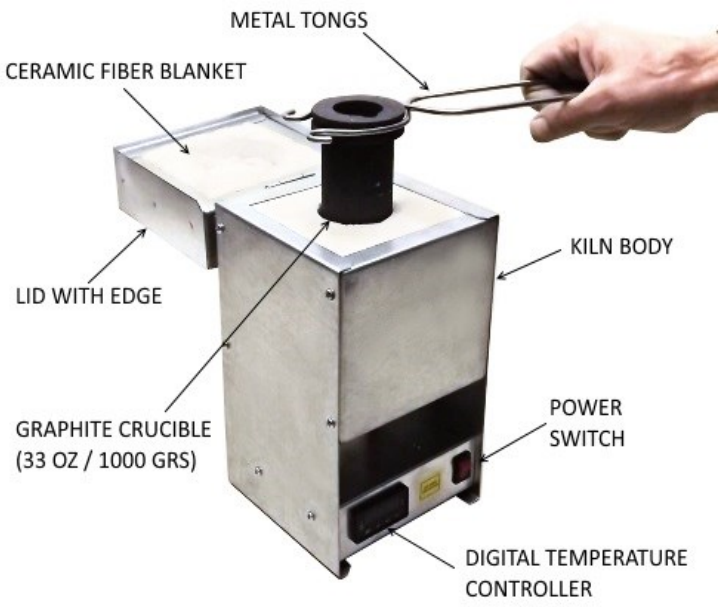


TECHNICAL SPECIFICATION:

MODEL:	R9D-33-1130C	ADJUSTED TEMPERATURE RANGE	0 C - 1130 C (32 F - 2066 F)
INPUT:	115/220/240V ON REQUEST	ACCURACY:	+/- 1%
POWER:	650 WATT	INSULATION MATERIALS:	MUFFLE & CERAMIC FIBER
MAXIMUM TEMPERATURE:	1130 C / 2066 F	CRUCILE WORKING CIRCLE (WITH A GRAPHITE PROTECTOR PAINT)	10 GOLD MELTING PROCESSES
MAXIMUM HEATING TIME	90 MINUTES	CRUCILE - EXTERNAL DIMS	TD=60; BD=47; HIGH=80
MATERIAL OF CRUCIBLE:	GRAPHITE MSSM	CRUCIBLE — HOLE DIMS (MM):	D=32; DEPTH=70
VOLUME OF CRUCIBLE :	33-Oz (1000 G) PURE GOLD	DIMESIONS OF KILN:	130 X 130 X 270(H) MM
CONTINUOUSLY WORKINGTIME:	8 HOURS	WEIGHT:	3.0 KG



PIC: 2



PIC: 3

PREPAIRING FOR WORK:

- Remove the kiln from its original box/s.

- Put the kiln on a heat-resistant work-top such as masonry, concrete, metal or ceramic tiles.

- Place 33-Oz graphite crucible into the hole on the top of the kiln (Pic: 3).

- Insert small pieces of metal to be melted into the crucible: we recommend cutting your metal into small pieces (7-10 mm work best). The smaller the pieces the less time it takes to heat up and longer life of the crucible.

- Close the graphite crucible by shutting the metal lid with the edges around the three sides. Please make sure that it is in a correct position and cover the graphite crucible in full (Pic: 1).

- Now you can connect your kiln to a power source and start your work.

SAFETY AND USEFUL TIPS FOR BEGINNERS:

Always make sure that the lid is closed properly in order to speed up the heating process and to reach the required temperature inside the chamber.

Always work with heat-resistant gloves because this kiln is very compact and gets hot whilst working on high temperatures.

Do not open the lid two often. Each time you open the lid, the temperature inside the chamber drops and it will require more time to re-heat.

Always place this kiln on a heat resistant work-top. A masonry or concrete floor is recommended, but other protective material like metal or ceramic tiles can be used as well.

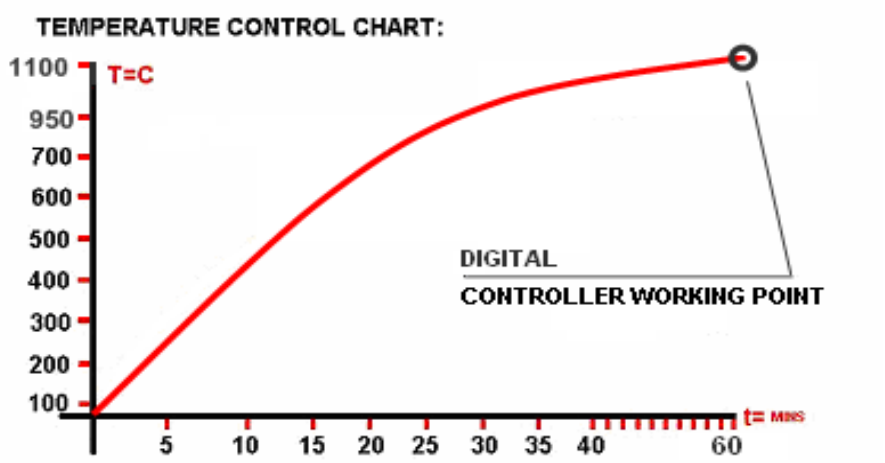
If you do not use a graphite protector paint, never heat the crucible continuously longer than 90 minutes. Due to the structure of a graphite it may cause cracks to the crucible and a sudden leek of the molten metal inside the furnace. A standard gold melting process lasts only about 50-60 minutes if prepared correct. Spare standard graphite crucibles and a graphite protection liquid/ paint are available at any time from your agent or manufacturer.

Never take hot graphite crucible by hand when lifting it up from its hole (Pic: 3). For this purpose use only stainless steel tongs that are supplied with the kiln.

FIRST TIME USE:

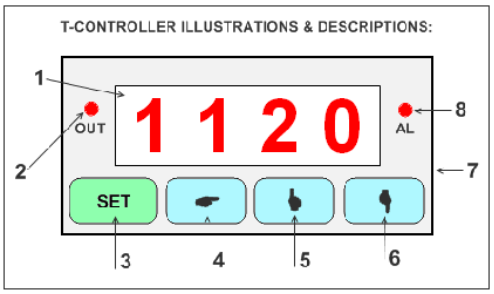
IMPORTANT: When using this kiln for the first time, please heat it up for approximately 3-5 minutes to allow water to evaporate from the chamber and from inside of the kiln (slight odour and light smoke may be visible but this is normal). Otherwise there is a risk of causing small cracks on the top of the chamber. Let the kiln cool down before you start to work. If this kiln is to be used for less than once per month please repeat this process each time before use.

NOTE: To avoid problems with the heating element this digital temperature controller (Pic:1) is pre-settled by the manufacturer to a high temperature of 1130°C (2066°F). You can set a higher temperature manually - for example to see on the screen 1300 C (2372 F), but however, the controller will still heat your kiln up only to 1130 C (2066 F) or less - depending of your setting. Please see a sample of temperature chart below:



WORK WITH TEMPERATURE CONTROLLER:

Pic: 4 (Digital temperature controller sample)



1. Display: temperature can be displayed in degree Celsius (°C) or in Fahrenheit (F).
2. Operational indicator (operates during a heating process).
3. Setting/Confirmation button. To be used only for the setup of controller's parameters.
4. Segment's selector (any one from four segments).
5. Value decrement / preceding parameter (Use to setup a required temperature).
6. Value increment / next parameter (Use to setup a required temperature).
7. The digital temperature controller's display itself.
8. Alarm or relay working indicator.

NOTE: You can find more information about available controller's settings and functions on its instruction manual that supplied separately, but we cannot recommend you to change the manufacture's setting yourself as it can cause the loss of factory settings and may require re-setting and/or re-calibration in future.

HOW TO PRE-SET A REQUIRED TEMPERATURE:

Connect your kiln to a power supply and switch it 'On'.

Press button '5' or "6" to get the temperature that is required. For example if you want to get 1070°C (1958 °F) from 1130 C(2066 F) that was pre-set before then hold button '5' until that temperature (1070 C) will be displayed.

Release the button and wait for approximately 5 seconds (flashing mode) until the controller will remember this new setting and then show you the current temperature inside its chamber.

If you want to reach any required temperature without standard temperature stabilisation process please use for this purpose auto-tuning process by pressing 2-3 seconds on **">"** button. It may help you to reach required temperature quicker and more accurate. When you'll not require the auto-tuning process longer then just press 2-3 seconds the **">"** button again.

HOW TO CHANGE SETTINGS TO "F" or "C":

Press "SET" once and enter (by pressing buttons 4;5 & 6) a password "**0089**".

Press "SET" again to see on display the sign "**IntY**". Then:

Press button 6 a few times to see on the display the sign "**CorF**" then press "SET".

You will see number 1 or 0 (or letter "F" or "C"). Choose a parameter required by pressing the button 5 or 6 and press "SET" again. (Number 0 or C for Celsius. Number 1 or F for Fahrenheit).

By pressing button 6 find the sign "**End**" and press "SET" again to remember your setting. After 5 seconds the display will stop flashing and start to show you the current temperature inside its chamber.

NOTE: If you have questions about how to use this controller please feel free to contact your agent or manufacturer for a professional assistance.

DELIVERY SPECIFICATION:

- R9D-33 kiln;
- 33-Oz (1000 Gram) graphite crucible;
- Metal tongs for the crucible;
- User manual and useful information on DVD;
- One year warranty.

KEEP OUT OF REACH OF CHILDREN AND NEVER LEAVE IT UNATTENDED IN WORK

DANGER: This is an electrical, high temperature equipment: always follow all health and safety rules and regulations for this equipment in your country.

MADE IN UK